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| PRE-APPEAL BRIEF REQUEST FOR REVIEW   |                          | Docket Number (Optional) |                                     |  |
|   |                          | 740165-373               |                                     |  |
| I hereby certify that this correspondence is being deposited with the   | Application Number Filed |                          |                                     |  |
| United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] | 10/809,937               |                          | 03/26/2004                          |  |
| on  | First Named Inventor     |                          |                                     |  |
| Signature   | Kentaro HAYASHI          |                          |                                     |  |
|   | Art Unit                 | Ex                       | aminer                              |  |
| Typed or printed name   | 3635                     |                          | Chi Q. Nguyen                       |  |
| Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.  |                          |                          |                                     |  |
| This request is being filed with a notice of appeal.  |                          |                          |                                     |  |
| The review is requested for the reason(s) stated on the attached sheet(s).  Note: No more than five (5) pages may be provided.  |                          |                          |                                     |  |
| I am the  |                          |                          |                                     |  |
| applicant/inventor.   | Thomase Cole             |                          |                                     |  |
|   |                          | Sig                      | nature                              |  |
| assignee of record of the entire interest.  See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.  | Thomas W. Cole           |                          |                                     |  |
| (Form PTO/SB/96)  |                          | Typed or p               | printed name                        |  |
| X attorney or agent of record. Registration number 28,290   |                          | 703) 677-30              |                                     |  |
|   |                          | Telepho                  | ne number                           |  |
| attorney or agent acting under 37 CFR 1.34.   | Jı                       | aly 17, 200              | 8                                   |  |
| Registration number if acting under 37 CFR 1.34   | -                        |                          | ate                                 |  |
| NOTE. Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.   |                          |                          |                                     |  |
| *Total of forms are submitted.  |                          |                          |                                     |  |

This collection of information is required by \$5 U.S.C. 132. The information is required to obtain or retain is benefit by the public which is to file (and by the U.SPTO to process) an application. Confidentially is governed by \$5 U.S.C. 132 and \$7 CFR.11.11.14 and 41.8. This collection is estimated to its less than 150 complete, including gathering, preparing, and submitting the completed application from to the USPTO. Time will vary depending upon the individual case. Any comments on the manunor of time you require to complete the information offices. U.S. Pleaset and Trademark Office, U.S. Department of the complete complete complete complete the information of the U.S. Department of Commerce, P.O. Box 1459, Alexandria, VA. 2213-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1459, Alexandria, VA. 2213-1450.

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| In re Patent Application of: | ) Confirmation No.: 6422  |
|------------------------------|---------------------------|
| Kentaro HAYASHI et al.       | ) Group Art Unit: 3635    |
| Application No. 10/809,937   | ) Examiner: Chi Q. Nguyer |
| Filed: March 26, 2004        | )                         |
| For: WOODEN MEMBER           | )                         |
| FABRICATION METHOD           | ) Dated: July 17, 2008    |

## PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop AF Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the USPTO OG Notice of July 12, 2005, applicants hereby request a panel review of the Examiner's Final Rejection of claims 1-13, 15-18 and 20 as "obvious" under 35 USC §103(a).

In order for an Examiner to sustain an obviousness-type rejection of a claim, he or she must consider all of the teachings of the cited prior art, including portions that would lead away from the invention. MPEP §2141.03(VI) Further, a mere statement that the claimed invention is within the capabilities of one of ordinary skill in the art is not sufficient by itself to establish even prima facie obviousness. Instead, these must be some articulated reasoning with some rationale underpinning to support a legal conclusion of obviousness. MPEP §2143.01(IV). As set forth in detail hereinafter, the Examiner has singularly failed to consider the contrary teachings present in the single reference relied upon for her §103 rejection, and has further failed to provide the required articulated reasoning and rationale underpinning to overcome the deficiencies and contrary teachings present in her single cited reference in order to support her legal conclusion of obviousness.

### I. The Invention

The invention is an improved process for fabricating a wooden member which is particularly adapted for use in a steering wheel. As is pointed out in the "Background" section of the application, in the processes used previously, a wooden member having a rectangular cross section was first softened and curved and then compressed to provide a steering wheel section having a rounded cross section. While such a method was operative to form such wooden steering wheel sections, applicant observed that such steering wheel sections were prone to discoloration and cracking during the compression step, and moisture absorption and consequent shape deformation after the compression step.

Applicant surprisingly discovered that not only the discoloration problem was caused by the high compression ratios of the wooden members at their corner portions, but that the shape deformation and cracking problems were also caused by these high compression ratios. Accordingly, applicant proceeded to chamfer the corners of the wooden member prior to the compression step to lower the compression ratio in the corner regions. Applicant further unexpectedly discovered that the cracking problems could be eliminated if the chamfering was such that in cross-section, a thickness dimension of a largest portion is at most 1.85 times a thickness dimension of a smallest portion. Finally, the applicant also discovered that when the angles of the obtuse angles that are formed by the chamfering are between 120° and 150°, it is possible to provide, by extremely simple processing, a more stable shape after processing and more uniform color tone.

#### II. The Claim Limitations

Claim 1 specifically recites a wooden member fabrication method comprising the sequential steps of providing a wooden member original with a long form and including a hole inside which extends in a length direction, the wooden member including a cross-section perpendicular to the length direction which is substantially a rectangle having corner portions;

<u>chamfering Said</u> corner portions of the wooden member <u>such that said wooden</u> <u>member has a polygonal cross-section for avoiding breakage of the wooden</u> member during a compression deforming step: and

<u>compression-deforming</u> the chamfered wooden member original in directions toward a center of the cross-section, for making an outer periphery of the wooden member original an arcuate surface.

Independent claim 11 more specifically recites the chamfering step by adding the following thickness ratio:

... that in the cross-section, a thickness dimension of a largest portion is at most 1.85 times a thickness dimension of a smallest portion for avoiding breakage of the wooden member during a compression deforming step;...

Finally, independent claim 18 even more specifically recites the chamfering step by specifying that:

the angles at portions which are chamfered are at least 120° and at most 150°;

### III. The Section 103 Rejection of Independent Claims 1, 11, and 18

The Examiner's Final Rejection of claims 1 and 11 in the Office Action mailed April 17, 2008 reads as follows:

"Mori [USP 6,817,100] discloses a wooden member fabrication method comprising the steps of: providing a wooden member original 42/44 with a long form and including a hole there inside (see Fig. 3) which extends in a length direction, the wooden member including a cross section perpendicular to the length direction which is substantially a rectangle of which comer portions have been chamfered (wherein 42 points to); and compression deforming the wooden member original in directions toward a center of the cross-section, for making an outer periphery of the wooden member original an arcs surface."

To the contrary, the Mori '100 patent does <u>not</u> disclose a fabrication method wherein "corner portions have been chamfered" from a wooden member including a cross section which is substantially a rectangle. The <u>only</u> support the Examiner points to in making this assertion is the vicinity of reference numeral 42 of the steering wheel shown in Figure 3. However, all that Figure 3 discloses is a rounded cross section of a steering wheel. There is absolutely no suggestion in Figure 3 that the rounded cross-section was formed by <u>chamfering a rectangular cross section of a piece of wood</u> "such that said wooden member has a polygonal cross-section for avoiding breakage of the wooden member during a compression

deforming step," as recited in claim 1. Insofar as the Mori '100 patent discloses <u>anything</u> about the original shape of the front and back side pieces, it discloses that these pieces are <u>rounded</u> before being shaped into their final forms, and are <u>carved</u> into their final shapes <u>without</u> chamfers. In particular, column 7, lines 4-14 and FIG. 6 of the Mori '100 patent describe how the curved outer surfaces 80, 82 of the front and back side pieces 42, 44 are carved down to the final surfaces 46, 52 indicated in phantom. Hence there is no disclosure whatever in the Mori '100 patent of a fabrication method wherein "corner portions have been chamfered" from a wooden member including a cross section which is substantially a rectangle.

Moreover, the Mori '100 patent actually <u>teaches against</u> the step of "compression deforming" the wooden member original in directions toward a center of the cross-section, for making an outer periphery of the wooden member original an arc surface." Column 5, lines 25-31 state that

"As shown in FIG.1, the front-side piece 42 is carved from a pure wooden material (a wooden material to which, after natural wood is cut and processed to be a predetermined shape, special processing (for example, laminating and the like) is not administered) of a natural wood into a shape of a curved stick which is arcuate along inner and outer peripheries of the rim portion 14." (Emphasis added.)

The back side piece 44 is likewise carved from a pure wooden material (see column 5, lines 44-49). Further references to the carving of the front and back side pieces of the steering wheel are present in column 7, lines 4-15 and lines 28-31. As carving and compression deforming are two entirely different techniques of wood shaping, and as the Mori '100 patent teaches only carving, and further expressly teaches against any "special processing" of the wooden elements forming the front and back side pieces 42, 44, the Mori '100 patent actually teaches against the step of "compression deforming" the wooden member original in directions toward a center of the cross-section, for making an outer periphery of the wooden member original an arc surface."

In short, as there is no teaching or suggestion whatever in the Mori '100 patent of a fabrication method wherein a rounded cross-section is formed by chamfering a rectangular

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cross section of a piece of wood "such that said wooden member has a polygonal crosssection for avoiding breakage of the wooden member during a compression deforming step," and as the Mori '100 patent actually teaches against the step of compression deforming the resulting polygonal-shaped wooden member toward a center of the cross-section "for making an outer periphery of the wooden member original an arc surface," the Examiner's rejection of claim 1 is untenable, and should be withdrawn.

#### IV. Conclusion

For all of these reasons, the Examiner has singularly failed to consider contrary teachings present in the single reference relied upon for her §103 rejection, and has further presented no articulated reasoning and rationale underpinning to support her legal conclusion of obviousness over the deficiencies and contrary teachings in her single, cited reference. Accordingly the rejection of independent claim 1 under 35 USC §103 should be withdrawn, as well as the rejection of independent claims 11 and 18 since these claims include all of the limitations of claim 1. As the balance of the pending claims are each dependent on one of claims 1, 11 and 18, the prompt issuance of a Notice of Allowance is earnestly solicited

The Commissioner is authorized to charge any overage or shortage of fees connected with this filing to Deposit Account No. 50-2478.

Respectfully submitted,

Registration No. 27,997

Customer No. 25570

Roberts Mlotkowski Safran & Cole. P.C.

P.O. Box 10064 McLean, VA 22102

Telephone: (703) 677-3001

Facsimile: (703) 848-2981